Claims

What is claimed is

1. (Currently amended) A planar precast construction block for transmitting a load to a support surface, the construction block comprising

    a substantially upright first edge chord and a second edge chord spaced apart from the first edge chord, each edge chord comprising

        a first end with a base surface, such that the base surface transmits a load from the edge chord to the support surface,

        a second end,

        a first surface in the same plane as the first surface of the other edge chord,

        a second surface in the same plane as the second surface of the other edge chord,

        at least one surface facing away from the other edge chord, and

        at least one fourth surface facing toward the other edge chord;

    a top support beam between the second end of the first edge chord and the second end of the second edge chord, such that the top support beam may transmit a load to the first edge chord and the second edge chord;

    at least one cross beam, such that the cross beam connects a portion of the first edge chord to the second edge chord; and

    ~~at least one block connection means~~ a biaxial sleeve connector integral to the first edge chord, such that a second construction block can be attached to the first edge chord.

2. (Original) The construction block of claim 1 wherein

a cross beam is a base beam between the first end of the first edge chord and the first end of the second edge chord, such that the base beam has a surface in the same plane as the base surfaces of the first and second edge chords.

3. (Original) The construction block of claim 2 further comprising

at least one cantilevered beam extension of the base beam, such that the base beam extends past an edge chord.

4. (Original) The construction block of claim 2 further comprising

a second cross beam positioned between the base beam and the top beam; and

a substantially vertical intermediate chord positioned between the first edge chord and the second edge chord, such that the intermediate chord connects a portion of the second cross beam to a portion of the base beam.

5. (Original) The construction block of claim 1 wherein

the support surface is selected from the group consisting of a slab foundation, a pier, a plurality of piers, a footing, a plurality of footings, a construction block, a structural module, and an on-grade surface.

6. (Currently amended) The construction block of claim 1~~00~~ wherein

the top beam has at least one cantilevered beam extension, such that the top beam extends past an edge chord.

7. (Original) The construction block of claim 1 further comprising

at least two intermediate cross beams positioned between the first and second ends of the first and second edge chords, such that each intermediate cross beam connects a portion of the first edge chord to the second edge chord.

8. (Original) The construction block of claim 7 wherein

at least one intermediate cross beam has at least one cantilevered beam extension, such that the intermediate cross beam extends past an edge chord.

9. (Original) The construction block of claim 1 wherein

the second edge chord is parallel to the first edge chord; and

the top support beam is perpendicular to the first edge chord and the second edge chord, such that the construction block is a rectangular construction block.

10. (Cancelled) The construction block of claim 1 wherein

the connection means is selected from the group consisting of sleeve connectors, keyed connectors, geometric interlocks, and hinged connectors.

11. (Cancelled) The construction block of claim 1 wherein

the connection means is a biaxial sleeve connector.

12. (Original) The construction block of claim 11 further comprising

a first biaxial sleeve connector on the first edge chord; and

a second biaxial sleeve connector on the second edge chord.

13. (Original) The construction block of claim 12 wherein

the second biaxial sleeve connector is oriented asymmetrically with respect to the first biaxial sleeve connector.

14. (Original) The construction block of claim 12 wherein

the second biaxial sleeve connector is oriented symmetrically with respect to the first biaxial sleeve connector.

15. (Currently amended) The construction block of claim 1 further comprising

at least one planar outward cantilevered extension from ~~the third surface of an~~ the first edge chord, such that the extension projects from a surface facing away from the second edge chord.

16. (Original) The construction block of claim 15 wherein

the extension is offset from the support surface.

17. (Currently amended) The construction block of claim 1 wherein

the first edge chord comprises

a first outside edge surface facing away from the ~~other~~ second edge chord, and

a second outside edge surface facing ~~away from~~ toward the ~~other~~ second edge chord.

18. (Original) The construction block of claim 1 wherein

the first edge chord comprises an extension beyond the top beam.

19. (Original) The construction block of claim 1 further comprising

at least one diagonal strut positioned between the first edger chord and the second edge chord.

20. (Currently amended) A precast construction block for transmitting a load to a support surface, the construction block comprising

a substantially upright first edge chord and a second edge chord spaced apart from the first edge chord, each edge chord comprising

a first end with a base surface, such that the base surface transmits a load from the edge chord to the support surface,

a second end,

a first surface in the same plane as the first surface of the other edge chord,

a second surface in the same plane as the second surface of the other edge chord,

at least one surface ~~and~~ facing away from the other edge chord, and at least one surface facing toward the other edge chord;

a substantially vertical intermediate chord positioned between the first edge chord and the second edge chord; the intermediate chord comprising

a first end with a base surface, such that the base surface transmits a load from the intermediate chord to the support surface,

a second end,

a first surface in the same plane as the first surfaces of the first and second edge chord;

a first top support beam between the second end of the first edge chord and the second end of the intermediate chord, such that the top support beam may transmit a load to the first edge chord and the intermediate chord;

a second top support beam between the second end of the second edge chord and the second end of the intermediate chord, such that the top support beam may transmit a load to the second edge chord and the intermediate chord;

a first intermediate cross beam, such that the first cross beam connects a portion of the first edge chord to the intermediate chord such that the intermediate cross beam has at least one cantilevered beam extension, such that the intermediate beam extends past the first edge chord; and

at least one block connection means integral to the first edge chord such that a second construction block can be attached to the first edge chord.

21. (Currently amended) The construction block of claim ~~20~~ 26 wherein

_the first cross beam and the second cross beam comprise a base beam between the first end of the first edge chord and the first end of the second edge chord, such that the base beam has a surface in the same plane as the base surfaces of the first and second edge chords.

22. (Original) The construction block of claim 21 further comprising

at least one cantilevered beam extension of the base beam, such that the base beam extends past an edge chord.

23. (Original) The construction block of claim 20 wherein

the support surface is selected from the group consisting of a slab foundation, a pier, a plurality of piers, a footing, a plurality of footings, a construction block, a structural module, and an on-grade surface.

24. (Original) The construction block of claim 20 wherein

the first top beam has a cantilevered beam extension, such that the first top beam extends past the first edge chord.

25. (Original) The construction block of claim 20 wherein

the second top beam has a cantilevered beam extension, such that the second top beam extends past the second edge chord.

26. (Currently amended) The construction block of claim 20 further comprising

a second cross beam, such that the second cross beam connects a portion of the second edge chord to the intermediate chord~~; and~~.

27. (Cancelled) The construction block of claim 20 further comprising

at least one intermediate cross beam positioned between the first and second ends of the first edge chord and the intermediate chord, such that the intermediate beam connects a portion of the first edge chord to the intermediate chord.

28. (Cancelled) The construction block of claim 27 wherein

the intermediate cross beam has at least one cantilevered beam extension, such that the intermediate beam extends past a edge chord.

29. (Original) The construction block of claim 20 wherein

the connection means is selected from the group consisting of sleeve connectors, keyed connectors, geometric interlocks, and hinged connectors.

30. (Original) The construction block of claim 20 wherein

the connection means is a biaxial sleeve connector.

31. (Original) The construction block of claim 30 further comprising

a first biaxial sleeve connector on the first edge chord; and

a second biaxial sleeve connector on the second edge chord.

32. (Currently amended) The construction block of claim 20 further comprising

at least one planar outward cantilevered extension from ~~the third surface of an~~ the first edge chord, such that the extension projects from a surface facing away from the second edge chord.

33. (Original) The construction block of claim 32 wherein

the extension is offset from the support surface.

34-61 (Withdrawn) .